c. Amendments to Claims

1. (Previously presented) A process for preparing optical fiber, comprising the steps of:

drawing fiber from a preform comprising a silica body, and

forming the body by a process including the step of, prior to sintering the body, treating the body at a temperature in the range of 300 to 900°C with a gaseous mixture comprising one or more non-oxygenated sulfur halides, and

wherein the one or more sulfur halides are generated by reaction of sulfur present in the body with halides flowed over the body.

2. (Original) The process of claim 1, wherein the body is selected from an overcladding tube and a substrate tube.

3. (Original) The process of claim 2, wherein the body is formed by a sol-gel process.

4. (Previously presented) The process of claim 1, wherein the temperature of treatment is in the range of 400 to 800°C.

5. (Previously presented) The process of claim 4, wherein the temperature of treatment is in the range of 600 to 700°C.

6. (Original) The process of claim 1, wherein the treatment is performed for a period of at least one hour.

7. (Original) The process of claim 6, wherein the treatment is performed for a period of at least two hours.

8. (Original) The process of claim 1, wherein the one or more sulfur halides comprise one or more sulfur chlorides.

9. (Original) The process of claim 8, wherein the one or more sulfur chlorides comprise at least one of sulfur monochloride and sulfur dichloride.

10. (Original) The process of claim 1, wherein the gaseous mixture further comprises at least one of nitrogen, air, helium, neon, and argon.

11. (Canceled)

12. (Original) The process of claim 1, wherein the treatment performs at least one of: reducing the size of at least a portion of refractory metal oxide particles in the body and reducing the concentration of refractory metal oxide particles in the body.

13. (Original) The process of claim 12, wherein the particles include at least one of chromia and zirconia.

14. (Original) The process of claim 1, wherein the treatment reduces the concentration of water and hydroxyl groups in the body.

15. (Original) The process of claim 1, wherein the gaseous mixture comprises 0.1 to 100 vol.% of the one or more sulfur halides.

16. (Original) The process of claim 15, wherein the gaseous mixture comprises about 6 to about 7 vol.% of the one or more sulfur halides.

17. (Original) The process of claim 1, wherein the body is subjected to a treatment with a gas comprising chlorine prior to the treatment with the one or more sulfur halides.

18. (Original) The process of claim 17, wherein the gaseous mixture comprising one or more sulfur halides comprises about 1 to about 2 vol.% of the one or more sulfur halides.

19. (Original) The process of claim 17, wherein the chlorine treatment reduces the concentration of water and hydroxyl groups in the body.

20. (Previously presented) The process of claim 17, wherein the chlorine treatment performs at least one of: reducing the size of at least a portion of chromia particles in the body and reducing the concentration of chromia particles in the body.

21. (Original) The process of claim 1, wherein the body is subjected to treatment with a gas comprising oxygen subsequent to the treatment with the one or more sulfur halides.

22. (Previously presented) A process for preparing optical fiber, comprising the steps of:

drawing fiber from a preform comprising a sol-gel silica tube, and

forming the tube by a process including the step of, prior to sintering the tube, treating the tube at a temperature in the range of 300 to 900°C with a gaseous mixture comprising one or more non-oxygenated sulfur chlorides, and

wherein the one or more sulfur chlorides are generated by reaction of sulfur present in the tube with chlorine flowed over the tube.

23. (Previously presented) The process of claim 22, wherein the temperature of treatment is in the range of 400 to 800°C.

24. (Previously presented) The process of claim 23, wherein the temperature of treatment is in the range of about 600 to about 700°C.

25. (Original) The process of claim 22, wherein the treatment is performed for a period of at least two hours.

26. (Original) The process of claim 22, wherein the one or more sulfur chlorides comprise at least one of sulfur monochloride and sulfur dichloride

27. (Canceled)

28. (Original) The process of claim 22, wherein the treatment performs at least one of: reducing the size of at least a portion of refractory metal oxide particles in the tube and reducing the concentration of refractory metal oxide particles in the tube.

29. (Original) The process of claim 22, wherein the gaseous mixture comprises 0.1 to 100 vol.% of the one or more sulfur chlorides.

30. (Original) The process of claim 29, wherein the gaseous mixture comprises about 6 to about 7 vol.% of the one or more sulfur chlorides.

31. (Original) The process of claim 22, wherein the tube is subjected to a treatment with a gas comprising chlorine prior to the treatment with the one or more sulfur chlorides.

32. (Original) The process of claim 22, wherein the tube is subjected to treatment with a gas comprising oxygen subsequent to the treatment with the one or more sulfur chlorides.

33. (Previously presented) The process of claim 22, where the tube is selected from an overcladding tube and a substrate tube.

34. (Previously presented) A process for preparing optical fiber, comprising the steps of:

drawing fiber from a preform comprising a sol-gel silica tube, and

forming the tube by a process including the steps of, prior to sintering the tube:

providing a silica dispersion,

forming from the dispersion a gelled tube comprising refractory metal oxide particles,

heating the entire gelled tube to a temperature in the range of 400 to 800°C and, while the gelled tube is at the temperature, treating the gelled tube with a gaseous mixture comprising one or more non-oxygenated sulfur halides, the treatment performed for a time period that provides sufficient diffusion of the one or more sulfur halides into the gelled tube such that at least one effect selected from the group consisting of reducing the size of at least a portion of the refractory metal oxide particles in the gelled tube and reducing the concentration of the refractory metal oxide particles in the gelled tube, is achieved.

35. (Previously presented) The process of claim 34, wherein the temperature of treatment is in the range of 600 to 700°C.

36. (Previously presented) The process of claim 34, wherein the time period is at least two hours.

37. (Previously presented) The process of claim 34, wherein the one or more sulfur halides comprises one or more sulfur chlorides.

38. (Previously presented) The process of claim 37, wherein the one or more sulfur chlorides comprise at least one compound selected from the group consisting of sulfur monochloride and sulfur dichloride.

39 – 40. (Canceled)

41. (Previously presented) The process of claim 37, wherein the gaseous mixture comprises about 6 to about 7 vol.% of the one or more sulfur chlorides.

42. (Previously presented) The process of claim 34, wherein the gelled tube includes chromia particles, wherein the gelled tube is subjected to a treatment with chlorine gas prior to the treatment with the one or more sulfur halides, and wherein the chlorine gas treatment performs at least one action selected from the group consisting of

reducing the size of at least a portion of the chromia particles in the gelled tube and reducing the concentration of the chromia particles in the gelled tube.

43. (Canceled)

44. (Previously presented) The process of claim 34, wherein the tube is an overcladding tube or a substrate tube.